

## A NEW SPECIES OF THE GENUS *RHOPALOPSOLE* (PLECOPTERA, LEUCTRIDAE) FROM SICHUAN, CHINA

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**Abstract** A species of the genus *Rhopalopsole*, *R. lii* sp. nov., is described as new to science from China. Its relationship with the relative species is discussed. The type is deposited in the Entomological Museum of China Agricultural University, Beijing.

**Key words** Plecoptera, Leuctridae, *Rhopalopsole*, new species, Sichuan

The genus *Rhopalopsole* is one of the largest genus in the family Leuctridae and is characterized by a short subgenital plate on sternum 9, tergum 10 with sclerotized lateral projections and long cylindrical cercus in males (Zwick 1977; Sivec *et al.*, 2008). There have been 33 species recorded from China by Klapálek (1912), Wu (1949, 1973), Yang and Yang (1991, 1993, 1995a & b), Yang and Yang (1991, 1994), Yang *et al.* (2004), Yang and Li (2006) and Sivec *et al.* (2008). In the present paper, a species of *Rhopalopsole* from Sichuan Province is described as new to science. The type material is deposited in the Entomological Museum of China Agricultural University, Beijing. Morphological terminology generally follows that of Sivec *et al.* (2008).

*Rhopalopsole lii* sp. nov. (Figs 1-5)

**Diagnosis** This species is defined by tergum 9 with a darkly sclerotized median plate, two paramedian fields of tiny knobs and two lateral processes at posterior margin and tergum 10 with very long lateral projections. The cercus has an apical spine and the subanal lobe is bipartite and subtruncate apically.

**Male** Forewing length 5.0 mm, hindwing length 4.2 mm. Head dark brown, slightly wider than pronotum; compound eyes dark; antennae and mouthparts dark brown. Thorax brown, pronotum dark brown; wings membrane brownish with veins dark brown; legs brown. Abdomen brown; subgenital plate dark brown.

**Genitalia** (Figs 1-5). Tergum 9 mostly sclerotized, an elevated spine-like process surrounded

by a darkly sclerotized median plate, two paramedian fields of tiny knobs and two lateral processes at posterior margin. Base of sternum 9 with a tongue-like vesicle covered with dense hairs; subgenital plate distinct and wider than long. Tergum 10 with strongly sclerotized lateral projections originating from a quadrate plate and forming a pair of long and sinuous processes; the process extends much beyond the midline of the segment and overcrosses the corresponding one from the other side. Central plate of tergum 10 sclerotized, elevated into a pair of heavily sclerotized humps with a narrow concavity and cuticular roughage of ornamentation at distal part; transverse bars nearly triangular with rounded corners, inner angles hidden by the epiproct. Cercus long and upturned, with a tiny apical spine. Epiproct long and recurved backward, with apex slightly tapering toward tip in dorsal view but expanded in lateral view. Subanal lobe large sized, distinctly sclerotized basally and medially, bipartite with a longitudinal depression mesally, with rather wide and subtruncate apical margin; ventral furrow well defined.

**Female** Unknown.

**Holotype** ♂, China, Sichuan, Qingshengshan, 2 May 1978, LI Far-Sheng.

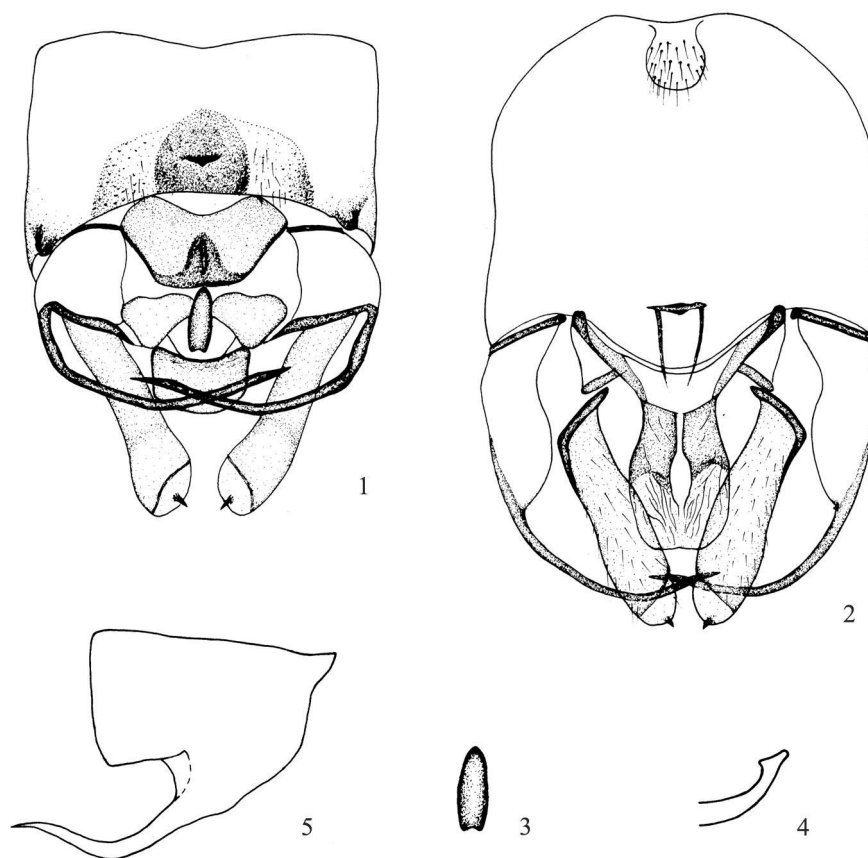
**Distribution** China (Sichuan).

**Etymology** The species is named after the collector, Prof. LI Far-Sheng.

**Remarks** The new species is related to *Rhopalopsole dentata* group in having the very long lateral projections and the upraised process on tergum 9, but the expanded tip of the male epiproct in lateral view and the lateral projections at posterior margin on tergum 10 are diagnostic.

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Figs 1-5. *Rhopalopsale lii* sp. nov. (male). 1. Terminalia dorsal view. 2. Terminalia ventral view. 3. Epiproct dorsal view. 4. Epiproct lateral view. 5. Tegumen lQ lateral view.

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## 四川诺 属 (襁翅目, 卷 科) 一新种记述

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**摘 要** 记述采自四川 1 新种, 李氏诺 *Rhopalopsale lü* sp. nov., 并讨论了其与近似种的区别。模式标本保存在中国农业大学标本馆。

**李氏诺**, 新种 *Rhopalopsale lü* sp. nov. (图 1~5)

新种与浙江诺 *Rhopalopsale zhejiangensis* Yang et Yang 1995 近似, 第 10 背板侧突都很长, 同属于锐刺诺 种团。

**关键词** 襁翅目, 卷 科, 诺 属, 新种, 四川.

**中图分类号** Q969.24

二者的主要区别在于: 新种雄虫第 9 背板后缘两侧各有 1 个突起, 尾须端部有刺。而浙江诺 雄虫第 9 背板后缘中部仅有 1 刺突, 两侧无突起, 尾须端部无刺。

正模 ♂, 四川青城山, 1978-05-02 李法圣采。

词源: 新种以采集人的姓氏命名。